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AUGUST 25, 1998

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LAHIVE & COCKFIELD, LLP AMY E. MANDRAGOURAS 28 STATE STREET BOSTON, MA 02109



UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 06/04/1998

REEL/FRAME: 9244/0482

NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

MCCARTHY, SEAN A.

DOC DATE: 03/31/1998

ASSIGNEE:

MILLENNIUM BIOTHERAPEUTICS INC. 620 MEMORIAL DRIVE CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER: 09009802

PATENT NUMBER:

FILING DATE: 01/20/1998

ISSUE DATE:

JACQUELINE MOORE, PARALEGAL ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS



ASSIGNMENT

I, Sean McCarthy, of 145 Pickney Street, #103, Boston, MA 02114, in consideration of One Dollar and other valuable consideration paid to me by

MILLENNIUM BIOTHERAPEUTICS, INC.

a corporation of Deleware, having its principal place of business at 620 Memorial Drive, Cambridge, MA 02139, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

MILLENNIUM BIOTHERAPEUTICS, INC.

its successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

NOVEL CRSP PROTEIN AND NUCLEIC ACID MOLECULES AND USES THEREFOR described in an application

— executed by me of even date herewith and about to be filed

— X Serial No. 09/009,802, filed on January 20, 1998

in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And I agree, for myself and my executors and administrators, with said corporation and its

all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And I agree, for myself and my executors and administrators, with said corporation and its successors and assigns but at its or their expense and charges, hereafter to execute all applications, amended specifications, deed or other instrument, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And I do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this	day of $3/31/98$, 1998.
	By: Sean McCarthy
State of Massachusetts)	
County of Middlesex)	
Then personally appeared the above named	Sean McCarthy and acknowledged the foregoing

instrument to be his free act and deed, before me, this 315t day of march

Notary Public Simpline L. Corriveau

My commission expires: 9/3/99

MEI\008\ASSIGN DOC

(Rev. 6-93) /s/ C/455 /M7) OMB No. 0651-0011 (exp. 4/94) 6-4-9	06-19-		Patent and Traden
Tab settings ⇔⇔⊽ To the Honorable Commission			JUN 8 1998
Name of conveying party(ies):	^{ner c} 100742	072	died original documents or copy thereof.
ĺ		2. Name and	u address of receiving party(ies)
Sean A. McCarthy, Ph.D.		Name:	Millennium Biotherapeutics Inc.
Additional name(s) of conveying party(ies)) attached? □ Yes 区 No	Internal A	
<u>.</u>			
Nature of conveyance			
☑ Assignment	☐ Merger	Street Add	dress: 620 Memorial Drive
☐ Security Agreement	☐ Change of Name	٠	
Other		City:_Can	nbridgeState:_MAZIP: 02
Execution Date: March 31,	1998	1	(s) & address(es) attached? ☐ Yes ☑No
A. Patent Application No.(s) 09/009,802		B. Patent N	10.(s)
09/009,802 5. Name and address of party to w	Additional numbers attac	hed? □ Yes ເ⊠	, ,
09/009,8025. Name and address of party to w concerning document should be	hom correspondence mailed:	hed? □ Yes 区 6. Total numbe	No er of applications and patents involved
09/009,802 5. Name and address of party to w	hom correspondence mailed:	hed? □ Yes 区 6. Total numbe	No er of applications and patents involved 7 CFR 3.41)\$ 40.00
5. Name and address of party to w concerning document should be Name: Amy E. Mandragouras	hom correspondence mailed:	hed? □ Yes 区 6. Total numbe 7. Total fee (37	No er of applications and patents involved 7 CFR 3.41)\$ 40.00
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5. Name and address of party to w concerning document should be Name: Amy E. Mandragouras Internal Address: Lahive & Cock! Street Address: 28 State Street City: Boston State: M. 5. Statement and signature. To the best of my knowledge and be the original document. Amy E. Mandragouras Name of Person Signing	A ZIP: 02109 DO NOT USE T	6. Total number 7. Total fee (37) Enclosed Authorize 8. Deposit according to the composit accor	No er of applications and patents involved 7 CFR 3.41)\$ 40.00 d to be charged to deposit account punt number: 30 ect and any attached copy is a true copy 449 449 449 449 449 449 449 4

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